

**Notice of Allowability**

Application No.

09/852,376

Examiner

Anh-Vu H. Ly

Applicant(s)

JACOBSEN, ERIC A.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed January 10, 2007.
2. ☒ The allowed claim(s) is/are 1-3, 5-14, and 16-29 renumbered as 1-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul J. Urbanski on February 02, 2007.

The application has been amended as follows:

#### *In The Claims*

Claim 7, in line 15, replace "the equalization coefficient" with --the first equalization coefficient--.

25. (Currently Amended) A computer readable medium encoded with instructions therein, which when executed by a computer ~~processed result in a machine~~ comprises:

determining a set of subcarriers of interest from an OFDM symbol having a plurality of data subcarriers and a plurality of pilot symbols, wherein the set of subcarriers of interest is assigned to a user terminal and is a subset of the plurality of data subcarriers;

forming a pilot vector using a subset of pilot symbols from the OFDM symbol;

obtaining a first interpolation vector corresponding to a first subcarrier of interest selected from a plurality of stored interpolation vectors corresponding to each subcarrier of interest for the user terminal;

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calculating a dot product of said first interpolation vector and said pilot vector to generate an equalization coefficient for said first subcarrier of interest; and

equalizing at least one subcarrier using the equalization coefficient to reduce or remove undesirable channel effects from the OFDM symbol.

***Allowable Subject Matter***

2. Claims 1-3, 5-14, and 16-29 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest obtaining a first interpolation vector corresponding to a first subcarrier of interest, the first interpolation vector selected from a plurality of stored interpolation vectors corresponding to each subcarrier of interest assigned to the user terminal; calculating a dot product of said pilot vector and said first interpolation vector to generate an equalization coefficient for said first subcarrier of interest; and equalizing at least one subcarrier using the equalization coefficient to reduce or remove undesirable channel effects from the OFDM symbol, as specified in independent claims 1, 7, 19, and 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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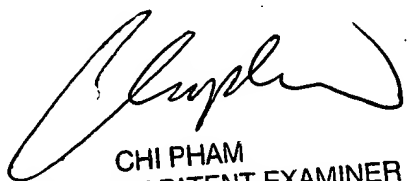
***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
2/5/07